

## A new species of *Rhigioglossa* (*Mesomyia*) from the Natal Drakensberg (Diptera: Tabanidae)

by

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### ABSTRACT

*Rhigioglossa* (*Mesomyia*) *smaragdops* sp. n. is described and figured. It is closest to *R. (M.) aurantiaca* (Oldroyd), but differs in the colour of the antennae and wings, and in the form and vestiture of the head. It represents the first record of the subgenus from the Natal Drakensberg.

### INTRODUCTION

Despite the major contributions to our knowledge of the South African tabanid fauna by Oldroyd (1952 1954 1957) and Usher (1972 and references therein), new species are still being discovered. The species described below keys to *Mesomyia* Macquart in Oldroyd (1957), which is a rather heterogeneous segregate presently lacking any defined autapomorphies. Within *Mesomyia* [now included in *Rhigioglossa* Wiedemann by Chainey (1987)] it keys to subgenus *Mesomyia* Macquart, 1850 on account of the rather broad, partly pollinose frons with well-defined callus. The conspicuously setose eyes are also characteristic of the subgenus.

In the description the frontal index is defined as the width of the frons at its base against its length. The length of the insect is measured from the antennal insertions to the tip of the abdomen, and of the wing in a straight line from the base to the tip.

### *Rhigioglossa* (*Mesomyia*) *smaragdops* sp. n.

Figs 1–4

Etymology: L. *smaragdinus* = emerald green; Gk. *ophthalmus* = eye. Refers to the brilliant green eyes in life.

Description: Based on holotype female.

Dimensions: Body length 11,7 mm; wing length 10,0 mm.

*Head*: Eyes conspicuously and moderately densely golden-yellow setose; in life turquoise-emerald with golden-copper iridescence. Frons short, fairly broad and somewhat divergent, index 0,75, densely orange pollinose at sides and tawny pollinose medially between ocellar tubercle and callus; golden-yellow setose. Callus reddish-brown, small, flat and diamond-shaped with upper angle attenuate as a narrow line extending to ocellar tubercle. Subcallus somewhat inflated. Subcallus, face and parafacials thickly orange pollinose and conspicuously golden-yellow setose, tufts on subcallus particularly prominent. Palpi without groove; reddish-

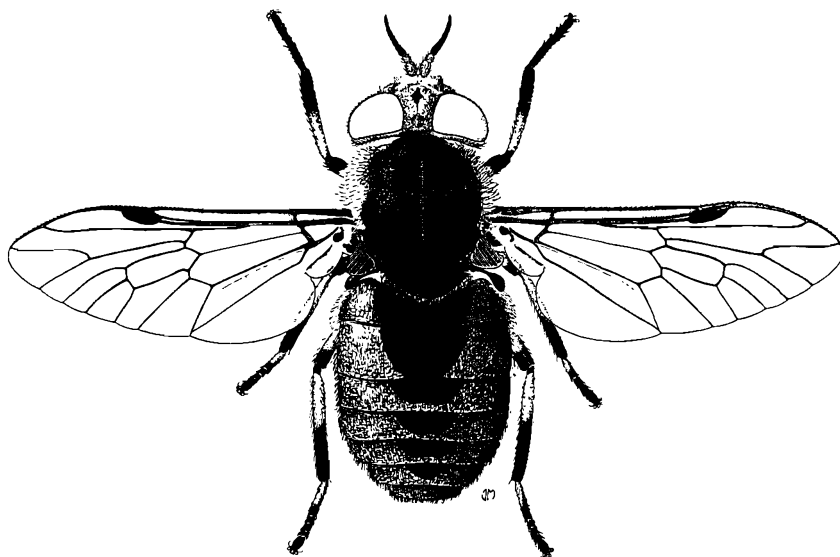


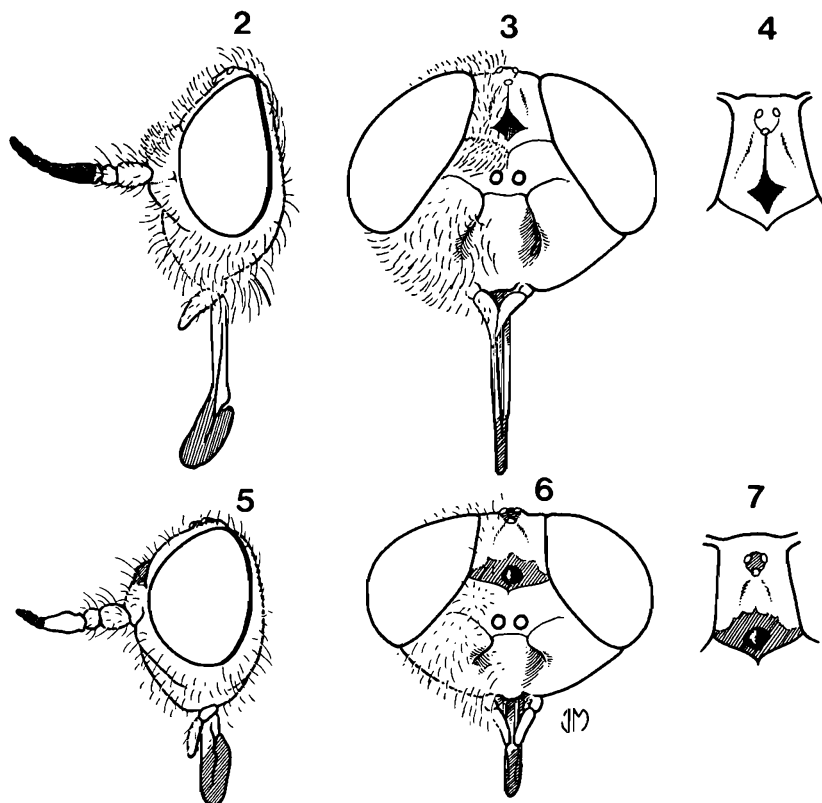
Fig. 1 *Rhigioglossa (Mesomyia) smaragdops* sp. n., holotype female.

brown with tawny setae and a few black setae near tips. Proboscis about as long as head; shaft reddish-brown, tip blackish-brown. Antennal scape and pedicel orange, thinly whitish pollinose, golden-yellow setose (pedicel with 2 or 3 black setae amongst others); flagellum with orange basal rim, otherwise black.

**Thorax:** Mesonotum (lateral margins excepted), blackish-brown with thin median greyish-brown stripe; entirely golden-yellow setose. Lateral margins of mesonotum, and humeral and notopleural lobes orange. Scutellum blackish-brown with greyish pollinosity at sides; densely golden-yellow setose. Pleura mostly orange, but black ventrally, pollinosity thinly orange; golden-yellow setose. Coxae orange, thinly greyish-yellow pollinose with golden-yellow setae, particularly conspicuous on fore coxae. Femora reddish-yellow but black at tips, setae concolorous. Tibiae reddish-yellow but black basally and in apical half; setae black. Fore tarsi completely black, but others reddish-brown with black tips; all with black setae. Wing hyaline except for yellow costal cell. Stigma dark brown, conspicuous. Veins and squamae yellowish. Halteres reddish-yellow.

**Abdomen:** Dorsum mainly orange with median row of black spots, one on fore margin of each tergum; these large anteriorly, as broad as scutellum, and reaching hind margin of first two terga, but diminishing in size posteriorly and not reaching hind margins of remaining terga; golden-yellow setose. Sterna orange with greyish-yellow pollinosity; golden-yellow setose.

Material examined: SOUTH AFRICA: Natal: 1 ♀ (holotype), Cobham Forest Reserve, Lakes Cave area, 29°39'50"S:29°18'40"E, 15.xii.1982, 2400 m, J. Manning (Natal Museum Type No. 25).



Figs 2-7. *Rhigioglossa* (*Mesomyia*) species. 2-4. *R. (M.) smaragdops* sp. n., holotype female, aspects of head. 2. Lateral. 3. Frontal. 4. Frons. 5-7. *R. (M.) aurantiaca*, paratype female, aspects of head. 5. Lateral. 6. Frontal. 7. Frons.

Remarks: This new species is easily recognised by the orange head (contrasting sharply with the blackish thorax) and orange abdomen, which has a row of median black spots. The whole fly is covered with golden-yellow setae. In life the iridescent green eyes are a remarkable feature. It is closest to *R. (M.) aurantiaca* (Oldroyd 1957), to which it keys, and with which it agrees in general appearance and coloration. However, *aurantiaca* (Figs 5-7), is distinguished by the presence of some black setae on the frons, subcallus, face, parafacials, scape and pedicel; the absence of tufts on the subcallus; the raised cabochon-like callus, which is not connected to the ocellar tubercle; the antennal flagellum, which is completely orange in the basal half with just the apical four annuli black; shorter antennae and proboscis; femora and tibiae, which are brown only at the tips, and only slightly darkened tarsi; and the wings which are brown along the veins, with an inconspicuous brown stigma.

*M. aurantiaca* is known at present only from a few localities in the western Cape. Most of the species of subgenus *Mesomyia* are restricted to montane parts of the winter-rainfall region of the Cape Province, and *smaragdops* is the first to

be recorded from the Natal Drakensberg. The holotype was taken from sedges along a flush on a mountain ridge.

#### ACKNOWLEDGEMENTS

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